

AMENDMENTS TO THE DRAWINGS

Attached is one replacement drawing sheet showing the changes made to the figure, for review and approval by the Examiner.

Attachments: 1 Replacement Sheet

REMARKS

I. Status of the Claims and the Rejections

The drawing was objected to for insufficient line quality and for allegedly failing to show the shutter of original claim 10. Applicants have amended the drawing to clean up any unclear reference numbers and any line quality deficiencies. Furthermore, applicants observe that the shutters were illustrated in the original figure at reference numbers 36, 39, and 54 (also referred to as throttle devices), and these shutters are more clearly shown in the replacement figure for clarity. Therefore, applicants respectfully request that the objections to the drawing be withdrawn.

The Abstract was objected to for various informalities including the use of pronouns. Also, claims 1-11, 13 and 15-17 were objected to for similar informalities including the use of an acronym and for dependent claim 17 not further limiting the scope of independent claim 1. Applicants have thoroughly amended the claims and the Abstract to remove all grammatical errors, reference numbers, and potentially unclear language. Applicants have also amended claim 17 into independent form. Applicants have amended the specification of the application to add section headings and maintain consistency with the drawings and claims. For at least these reasons, applicants respectfully request that the objections to the Abstract and the claims be withdrawn.

Claims 1-11, 13 and 15-17 were rejected under 35 U.S.C. § 112, second paragraph, for alleged indefiniteness. More specifically, independent claim 1 was rejected for being written in narrative run-on fashion and failing to include articles before claim elements to indicate proper antecedent basis. Furthermore, claims 4, 5, 8, 10, and 15 were rejected for reciting alternative elements or a narrow range recitation within a broad range recitation in the same claim. As described previously, applicants have thoroughly amended the claims to remove

all grammatical errors and potentially unclear language. Applicants therefore request that the Section 112 rejections of claims 1-9, 11, 13 and 15-17 be withdrawn.

Substantively, claims 1, 3-11, 13 and 15-17 were rejected for alleged lack of novelty under 35 U.S.C. § 102 based on Brutscher U.S. Patent Application Publication No. 2003/0177780 ("Brutscher"). Claims 1, 11, 13, 15 and 17 were also rejected for alleged lack of novelty under 35 U.S.C. § 102 based on Munoz U.S. Patent Application Publication No. 2002/0166923 ("Munoz"). Claim 2 was rejected for alleged obviousness under 35 U.S.C. § 103 based on Brutscher or Munoz in view of Scherer U.S. Patent No. 6,293,494 ("Scherer"). Applicants respectfully traverse these rejections.

However, applicants have amended independent claims 1 and 17 to further clarify the subject matter regarded as patentable. Applicants have also amended claims 2-9, 11, 13, 15, and 16 and canceled claims 10, 12 and 14 in this response. In view of these amendments and the following remarks, applicants respectfully request reconsideration and allowance.

II. Claims 1, 3-9, 11, 13 and 15-17 are Novel

A. The Claims

Independent claim 1 is directed to a cooling air supply system for an aircraft configured to supply cooling air from the surroundings of the aircraft to at least two devices requiring cooling air within the aircraft. The cooling air system includes an air inlet, an air channel communicating with the air inlet, and an air distribution device for distributing air from the air channel to the at least two devices requiring cooling air. The cooling air system also includes "at least one shutter disposed in the air distribution device and configured to throttle the distribution of air to the at least two devices requiring cooling air." The air inlet is sized to

provide sufficient air flow to accommodate a maximum cooling air requirement of the at least two devices.

Claims 3-9, 11, 13, 15 and 16 depend from independent claim 1 and recite additional features of the cooling air supply system. In one example, claim 16 further recites that the at least two devices requiring cooling air are connected with a common cooling air outlet by expelled air pipes. Independent claim 17 is directed to an aircraft including a cooling air supply system, and corresponds substantially to the subject matter of independent claim 1.

B. The Deficiencies of the Cited Prior Art

Brutscher discloses an air conditioning system for an aircraft. As shown in FIG. 3, the air conditioning system includes a pair of parallel heat exchanger units (SHX 1, PHX 1, SHX 2, PHX 2) fed by a common ram air inlet (RAIA). The incoming air passes through the heat exchanger units, a compressor (C), and a water separation system (REH-CON WE) before being directed into a passenger cabin air supply. *See* paragraph [0062]. The parallel heat exchanger units and cooling circuits of the air conditioning system are provided for the primary purpose of redundancy in case of failure. *See* paragraph [0002]. In this regard, the air conditioning system of Brutscher only provides cooling air flow to one portion of the aircraft, and more specifically, the cabin.

By contrast, the currently claimed cooling air supply system supplies incoming air from the surroundings of the aircraft to at least two devices through the air distribution device. Brutscher fails to provide cooling air flow to at least two devices, so Brutscher is deficient with respect to independent claim 1. Furthermore, claim 1 also requires at least one shutter in the air distribution device for throttling the distribution of air to the at least two devices requiring cooling air. In contrast, Brutscher fails to disclose a shutter in any portion of the air conditioning

system. For at least this additional reason, Brutscher fails to disclose every element of independent claims 1 and 17.

Munoz discloses an environmental control system for supplying conditioned air to compartments of an aircraft. As shown in FIG. 2, the environmental control system includes a refrigerant loop (50) including two compressors (42, 52), a condenser (54) and an evaporator (44). The environmental control system does not include a shutter for throttling a distribution of air to at least two devices requiring cooling air. Consequently, Munoz also fails to disclose every element of independent claims 1 and 17.

Applicants also observe that the corresponding patent application of the present application (EP 1,699,688) in the European Patent Office ("EPO") was allowed on May 7, 2008 with claims that are consistent in scope with the current independent claims. A copy of this corresponding EPO application accompanies this response. The USPTO and the EPO have recently begun cooperating in the Patent Prosecution Highway to more quickly allow applications allowed in one patent office to be allowed with similar claims in the other patent office. The EPO did consider the Brutscher and Munoz references, but nevertheless found that claims of analogous scope are allowable over these references. Although the Patent Prosecution Highway was not applied for in the current case, applicants respectfully request that the USPTO consider the EPO allowance and follow the spirit of the Patent Prosecution Highway during reconsideration of these rejections.

Thus, independent claims 1 and 17 are allowable over Brutscher and Munoz. Each of dependent claims 3-9, 11, 13, 15 and 16 depends from independent claim 1 and includes one or more additional features in combination with the features of claim 1. For substantially the same reasons set forth above with respect to claim 1, and further because the cited prior art fails to teach or suggest the subject matter recited in the claims, applicants respectfully submit that

each of claims 3-9, 11, 13, 15 and 16 is also patentable. Applicants respectfully request that the rejection of claims 1, 3-9, 11, 13 and 15-17 be withdrawn, and that these claims be allowed.

III. Claim 2 is Not Obvious

A. The Claim

Claim 2 depends from independent claim 1, which is directed to a cooling air supply system for an aircraft as described previously. Claim 2 further requires that the air inlet is a National Advisory Committee for Aeronautics (NACA) air inlet in the outer skin of the aircraft.

B. The Deficiencies of the Cited Prior Art

As discussed above, Brutscher and Munoz are each directed to an air conditioning system or an environmental control system for a compartment of an aircraft. However, neither reference discloses a shutter disposed in the air distribution device. Scherer is directed to an aircraft air inlet for any purpose and is only cited for the teaching of a NACA-compliant air inlet. Scherer also fails to teach or suggest a shutter disposed in an air distribution device for delivering air to at least two devices requiring cooling air.

For at least these reasons, claim 2 is allowable over the cited combination of references. Applicants respectfully request that the rejection of claim 2 be withdrawn and the claim allowed.

IV. Conclusion

Based on the amendments to the claims and these remarks, applicants respectfully assert that all present claims are in condition for allowance, and respectfully request an allowance without further delay.

Applicants believe that no fee is due for this filing. But if the USPTO disagrees, please consider this as an authorization to charge Deposit Account 23-3000.

Respectfully submitted,

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